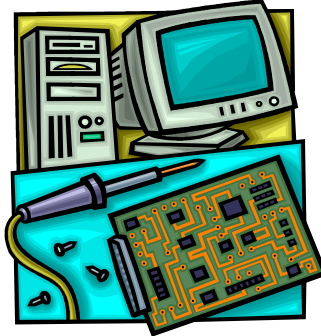


Modifications to DL Courseware Testing Process



Current CW Testing Process

Overview:

- ATSC receives course for testing at final delivery
 - SCORM
 - Playability
 - DTF configured PC (web version) via ILMS
 - Baseline home PC (CD-ROM)
- ATSC forwards web version to PM DLS for formal DTF playability certification after course passes ATSC testing
- After course passes PM DLS testing, course loaded to ILMS production server for fielding

Proponent/Contractor Issues:

- Test-Fix-Retest cycle takes too long
 - Over 90% of courses fail initial SCORM and/or playability testing
 - Average of three test cycles before course fully passes all tests
- Some redundancy in testing between agencies (ATSC & PM DLS)



Revised CW Testing Process

• General Strategy

- Shift focus from final testing to **testing throughout development** cycle
 - 100% review of prototype lesson (SCORM/Playability); tested until accepted
 - 100% review at **module** level (SCORM/Playability); delivered incrementally
 - 100% review of exams and 50-100% review of content for final delivery
- Testing early and throughout development process should reduce incidence of first time failures (currently 90% +) and number of retest cycles (currently average 3)
 - Test for **acceptance** of prototype and at final delivery; retest until course passes
 - Test for **compliance** during development phase; no retesting by ATSC (proponent and/or contractor can retest using LMS test server)
- Phase in implementation with new DLXXI Follow-On Contract
 - SOW Delivery Order Template modified to address incremental testing
 - Formal approval at 14-15 Sep 04 TCCB



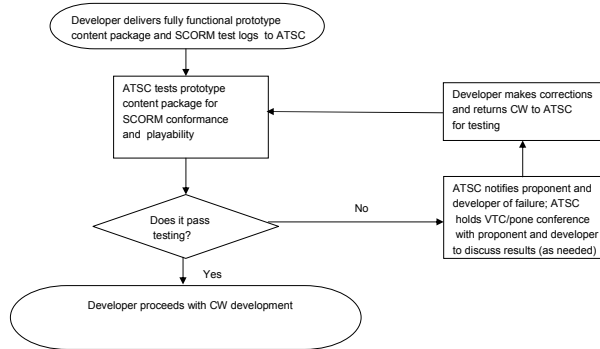
Revised CW Testing Process (con't)

SCORM Tests

Phase	Resource Validator	Content Package (ADL Option 4)	Run Time (ADL Option 2)	Army Run Time	Army Meta-data	Playability
Prototype	100%; Retested until accepted	100%; Retested until accepted	100%; Retested until accepted	100% (if required); Retested until accepted	N/A	100%; Retested until accepted
Development (incremental; by Module)	100%; One time test only	100%; One time test only	100%; One time test only	100% (if required); One time test only	N/A	100%; One time test only
Final Delivery	100%; Retested until accepted	100%; Retested until accepted	50 - 100%; Retested until accepted	50 - 100% (if required); Retested until accepted	Log review	100% exams; 50-100% on content; corrected fixes on retest



Prototype Testing Process



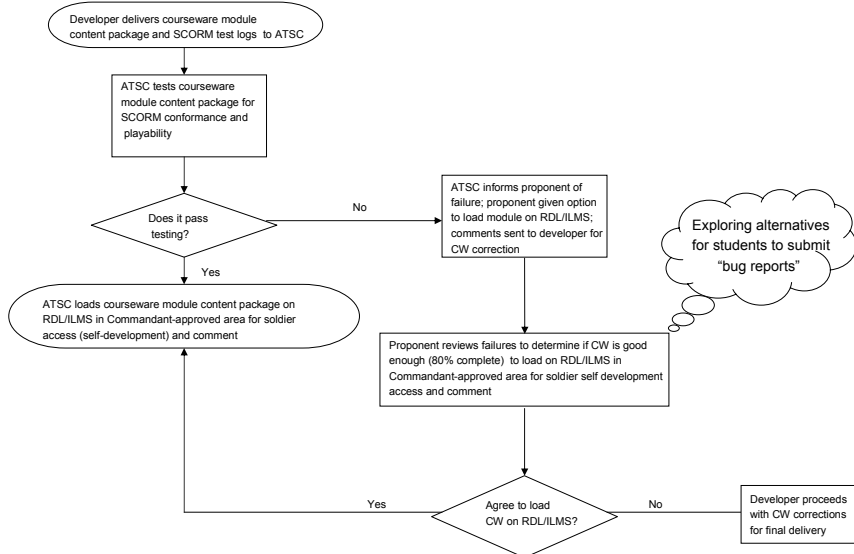
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CW Testing

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Development Testing Process



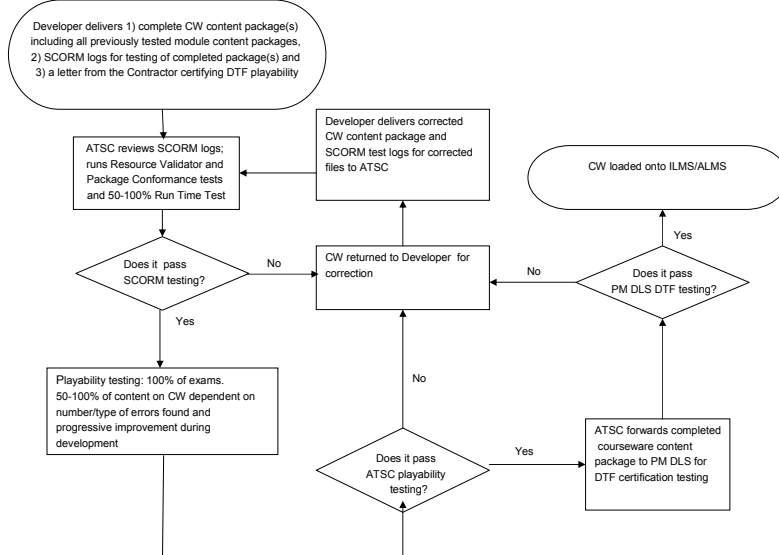
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CW Testing

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Final Testing Process



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CW Testing

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Current Courseware Testing Roles

ATSC Tested Courseware

	SCORM	LMS	DTF Playability (Web)	CD-ROM
ATSC	X	X (ILMS)	X (100%)	X (100%)
PM DLS		X (ILMS)	X (10%)	

Non-ATSC Tested Courseware

	SCORM	LMS	DTF Playability (Web)	CD-ROM
PM DLS	X	X	X (50%)	X (50%)

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CW Testing

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Proposed Courseware Testing Roles

Option 1: ATSC Tested Courseware (During ALMS Fielding)

	SCORM	LMS	DTF Playability (Web)	CD-ROM
ATSC	X	X (ILMS)	X (100%)	X (100%)
PM DLS	X*	X (ALMS)	X (50-100%)	

*SCORM testing only conducted if courseware fails to load to ALMS

Option 1: ATSC Tested Courseware (Post-ALMS Fielding)

	SCORM	DLS SYSTEM (ALMS/DTF)	CD-ROM
ATSC	X	X (100%)	X (100%)
PM DLS		X (10%)	

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Proposed Courseware Testing Roles (con't)

Option 2: ATSC Tested Courseware (Interim Centralized Course Mgr)

	SCORM	DLS SYSTEM (ALMS/Playability)	CD-ROM
ATSC	X	X (100%)	X (100%)
PM DLS		X (10%)	

- Assumptions:
 - ATSC performs centralized course manager role for TRADOC proponent schools not yet trained on DLS System (Interim basis)
 - Courseware built and tested for DLS System (ALMS/DTF) only
 - ATSC provided DLS System Course Manager training during 1st qtr FY05
 - ILMS maintained until legacy courses transitioned to ALMS
 - PM DLS will support iterative fielding of course modules for self development on ALMS
- Advantages:
 - Reduces development cost and fielding time (no dual testing)
 - Sends clear message that Army is serious about moving to ALMS
- Disadvantages:
 - May require additional level of effort (manpower?) at ATSC; analysis needs to be done

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CW Testing

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Preparing CW for the ALMS

- **File naming conventions** – File name case must be consistently used, must not contain spaces and must begin with a letter. The only acceptable characters will be A-Z, a-z, 0-9, hyphen (-) and underscore (_)
- **Directory names:**
 - case must match between the content directory listing and the imsmanifest.xml
 - must not begin with any non alphabetic characters; Use only a-z and A-Z as the lead character in the directory name.
- **If the package contains an Examination and the student must obtain a certain score to pass, then add the following to the imsmanifest.xml file:**

Under the <organization> section insert--

<adlcp:masteryscore>70</adlcp:masteryscore>

where the 70 represents whatever the mastery score is for this examination